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[54] **MULTIEYE IMAGING APPARATUS**

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[52] **U.S. Cl.** **348/218**; 348/36; 348/47

[58] **Field of Search** 348/14, 15, 36, 348/37, 38, 39, 42, 43, 44, 46, 47, 151, 218, 443, 444, 445, 446, 45, 48, 49, 50; 358/446, 450; 382/268, 284, 154; 356/376; 352/43, 60–65, 69–71

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[57] **ABSTRACT**

Disclosed is a multieye imaging apparatus for imaging an image field including an overlapped area by controlling a plurality of pick-up-image systems for obtaining an image having a desired aspect ratio that is different from an image obtained from a pick-up-image optical system. The multieye imaging apparatus has an image correlation processing unit for effecting a correlation operation from image signals obtained from a plurality of pick-up-image systems. The apparatus also has an image synthesizing processing unit for joining the other image on the basis of one image from the image signals relative to the correlation operation performed by the image correlation processing unit.

9 Claims, 30 Drawing Sheets